## ONTHOPHAGUS NUCHICORNIS L. (COL.: SCARABAEIDAE), A SPECIES MISUNDERSTOOD IN BRITAIN

## By A. A. ALLEN, B.Sc., A.R.C.S.\*

Though no-one would guess it from the literature — even up to and including Britton (1956:14) — everything points to this dung beetle as being a highly localized species with us, having moreover a special habitat. Personally I have found it at only three localities, all on the south-east coast: Deal and Littlestone (Kent) and Camber (E. Sussex), always on the loose sand of the dunes under or about dog dung — the only kind normally to be seen in such places. Inquiries among fellow coleopterists have elicited the fact that their experience of this *Onthophagus* is remarkably similar, including that of so widely-ranging a collector as the late C. E. Tottenham. Mr. P. J. Hodge, however, has met with it not only at Camber but also in the Suffolk Breck and at Oxwich in the Gower Peninsula of Glamorgan, again always on sand. Mr. Colin Johnson, who worked the dung beetles intensively round about the 1960s, tells me that he never encountered it.

This apparent restriction of the species to coastal dunes in comparatively few areas (the Breck is maritime in character) has never been pointed out in British works, as far as I am aware. Thus, the above facts contrast oddly with Fowler's statement under O. nuchicornis (1890:14): "The most widely distributed of all our species1; not uncommon in the Midlands and the south... London district, not uncommon" and with the long list of localities that follows — considerably more than he had given above for the locally frequent O. similis Scriba (then known as fracticornis Preyss.).

It might, therefore, be supposed that this is simply one more instance of an insect once rather common becoming very restricted and comparatively rare in recent times. Yet I cannot think that that is the case here. Fowler (l.c.) says nothing of the attachment of nuchicornis to sand, nor even of its liking for the coast as he had just done for 'fracticornis' (where it does not seem specially apt). The testimony of some of the older collections — or at least, of the few that I have consulted, now incorporated into the National (British) Collection at the BMNH — is instructive. In this, there are less than half as many exponents of nuchicornis as of similis. Some have no clearly marked locality; significantly, all the J. A. Power,

<sup>&</sup>lt;sup>1</sup>This statement, nevertheless, could well be correct if the Scottish records are genuine; the species, like O. similis, has since been recorded from Ireland (Joy, 1932).

<sup>\*49</sup> Montcalm Road, Charlton, London SE3 8QG.

G. C. Champion and H. C. Dollman specimens are from Deal, the species' apparent headquarters in the south-east, and they form the great majority; there are older ones from the Manchester district, Chesil Bank, and Bude. A few (Andrews Bequest) are labelled Reading — unlikely as a locality, and perhaps rather denoting the well-known early Plymouth collector of that name.

The above facts scarcely bear out Fowler's estimate of the British status of O. nuchicornis in his day. I can only suggest that the discrepancy may result from early confusion between this species and the closely related but much commoner O. similis. If so, its source is not far to seek: there seems to have been an idea then current that (of the two species) examples with the fore-body "bronze-green or coppery" (Fowler's words) were 'fracticornis', while those in which it was black with little or no metallic reflection could safely be referred to nuchicornis (cf.pp.11, 14). But this is illusory, even though there is always a certain (if slight) colour difference. For in fact a small proportion only of O.similis have the fore parts noticeably greenish, and that indistinctly (contrast O. vacca L. and O. coenobita Hbst.); the usual tint is an obscure nigro-aeneous, or in the words of Stephens (1839:156) "duskybrassy". Typical similis may thus, it seems to me, have been passing quite widely as nuchicornis among Fowler's correspondents, on whom he relied for localities. That he himself was not entirely free of the error is seen from his key on p.11, which separates these species as above, and so is misleading - notwithstanding that his descriptions on p.14 correctly give the structural differences. Later authors (Joy, Britton) avoid the error, but the resulting misconception as to relative frequency and habitat has remained more or less to this day, in that no distinction in these respects is made between the two species.

In passing it can be said that to anyone familiar with O. similis, O. nuchicornis seen for the first time at once strikes the eye as somehow different — no doubt owing to elytral pattern as well as the colour-tone of the fore-body. Curiously, both Stephens and Fowler make it slightly the smaller of the two on average, but it appears rather that the reverse is the case.

## References

Britton, E. B., 1956. Handbooks for the identification of British insects, 5 (11) (Coleoptera: Scarabaeoidea). London.

Fowler, W. W., 1890. The Coleoptera of the British Islands, 4. London.

Joy, N. H., 1932. A practical handbook of British beetles, 1. London. Stephens, J. F., 1839. A manual of British Coleoptera, or beetles. London.